

The
NOVUS
650/950
Calculator



NOVUS

Consumer Products from National Semiconductor

NS216EFGSP

Printed in U.S.A.

Operating Instructions for your NOVUS personal calculator.

Warning: Power switch **MUST** be in OFF position (to left) before connecting battery or AC wallplug adapter.

Your NOVUS calculator is manufactured by National Semiconductor Corporation, one of the world's leading producers of integrated circuits. The advanced design makes it easy to use in everyday operations.

If you've used other calculators, you'll probably find this one is a little different. Your NOVUS calculator uses the same mathematical "language," or logic system, as many computers and advanced scientific calculators. We chose this powerful language for your calculator because people who use math in their professional lives believe it's the most logical, consistent and efficient way to solve problems. Your NOVUS calculator lets you approach each problem the same direct way, displays each intermediate step you take, lets you easily correct wrong entries, and often takes fewer keystrokes to get an answer. After you do a few simple calculations, you'll quickly see how easy it is to use. Once you're used to it and discover the accuracy and computational power it gives you, we're confident you'll come to prefer the way your NOVUS calculator tackles math.

To clear: Press the **CE/C** key twice to clear everything and once to clear a wrong number entry.

Keyboard memory: The **ENT+** key is used to add, or enter the first figure into the keyboard memory. No matter what arithmetic function you plan, always press the **ENT+** key after entering the first number.

Repeat add or subtract: Each time the **ENT+** or **=** key is touched, the last number is added (or subtracted). See examples A and B. (Page 29)

Automatic squaring: Any entered number is squared by touching the **x²** key. See example D. (Page 29)

Overflow: When the number exceeds the capacity of the display, it overflows and shows one or more E's.

Decimal point: Fixed two-place decimal point is used for addition and subtraction only.

Finding decimal in division: For decimal accuracy in division, enter number to be divided (dividend), then fill display with as many zeroes as it will hold. Then enter the divisor, eliminating insignificant zeroes, and touch **÷**. To determine the proper decimal place in the answer, just remember this rule: **the number of decimal places in the dividend (numerator) minus the number of decimal places in the divisor (denominator) equals the number of decimal places in the answer (quotient).** See example F. (Page 29)

Low battery: If display appears dim or answers seem wrong, replace battery immediately.

NOVUS

Consumer Warranty Certificate

Model 650/950

NOVUS, the consumer products division of National Semiconductor Corporation, is proud to guarantee your electronic calculator to be free from defects in workmanship and material for a period of 1 year from the date of your purchase. Defects caused by abuse, accidents, modifications, negligence, misuse or other causes beyond the control of NOVUS are, of course, not covered by this warranty, nor are batteries. Should the calculator prove defective within 30 days of purchase, NOVUS will repair or, at its discretion, replace it free of charge. If the defect occurs after 30 days from date of purchase, a charge of US\$3.50 (or equivalent) will be made for handling and insurance. If your calculator becomes defective after the 1 year period, NOVUS will make repairs for a nominal charge of U. S. \$7.50 (or equivalent). Simply mail it prepaid and insured with your check or money order to the nearest NOVUS service center. Repair prices are subject to change without notice. Please do not send or include cash. Make your check or money order payable to NOVUS. Upon receipt, your calculator will promptly be serviced and returned to you freight prepaid.

A few words about

National Semiconductor.

National Semiconductor Corp., a global organization with its home base in Sunnyvale, California, is one of the largest manufacturers of integrated circuits in the world. Through its consumer products division, NOVUS, National Semiconductor is striving to translate pure technology into practical and affordable tools. You now own one such tool. We hope it serves you well in the years to come. Should you have questions about this or any other products from NOVUS, drop us a line.

We're here.

NOVUS

1177 Kern Avenue
Sunnyvale, CA 94086, U. S. A.



- ① Jack for AC wallplug adapter. Branchez la rallonge-secteur. Buchse für Netzanschluss-adapter. Receptáculo para adaptador de c.a. Contacto para o pino adaptador de c.a.
- ② Power switch **MUST BE OFF** before connecting battery or adapter. L'interrupteur **DOIT ÊTRE** sur OFF avant de brancher sur pile ou sur secteur. Schalter **m u s s** in Aus-Stellung (OFF) sein, bevor Batterie oder Netz angeschlossen werden. El interruptor de corriente **debe estar** en la posición OFF (apagado) antes de conectar la pila o el adaptador. A chave de liga-desliga **deve estar** na posição "OFF" (desliga) antes de conectar a pilha ou o adaptador.
- ③ Press **CE/C** key once to clear wrong entry and twice to clear all entries in the calculator. Appuyez une seule fois sur **CE/C** pour éliminer une entrée erronée et deux fois sur **CE/C** pour effacer totalement. **CE/C** — Taste einmal drücken, um falsche Eingabe zu löschen. **CE/C** — Taste zweimal drücken um alles zu löschen. Oprima la tecla **CE/C** una vez para borrar un número ingresado erróneamente o dos veces para borrar todas las cantidades ingresadas anteriormente. Pressione a tecla **CE/C** uma vez para apagar uma entrada errada e duas vezes para apagar todas as entradas anteriores.
- ④ Use 9-volt alkaline battery for longer life. Pour une plus grande durée utilisez une pile alcaline de 9 volts. 9 Volt-Alkalibatterie

verwenden für längere Betriebsdauer. Utilice una pila de 9 V para aumentar la duración. Use uma pilha alcalina de 9 V para vida mais longa.

- ⑤ Fixed two-place decimal point is used for addition and subtraction only. Pour l'addition ou soustraction le point est pré-fixé et ne laisse que deux places-décimales. Feste zweistellige Dezimaleinteilung nur für Addition und Subtraktion. El punto fijo con dos lugares decimales se usa solamente para suma o resta. O ponto decimal fixo, de duas casas, é usado apenas para adição e subtração.

- ⑥ Always enter (add) first number into keyboard memory with **ENT+** key. Entrez (ou additionnez) toujours le premier nombre dans la mémoire en appuyant sur la touche **ENT+**. Immer erste Nummer in den Speicher mit der **ENT+** Taste eingeben (addieren). Siempre ingrese (o agregue) el primer número en la memoria del teclado con la tecla **ENT+**. Sempre introduza ou adicione o primeiro número na memória com a tecla **ENT+**.

Examples. Exemples. Beispiele. Ejemplos. Exemplos.

	Press Touche Taste Pulsar Pressione	Display Ecran Anzeige Pantalla Mostrador
A $123 + 45 =$	CE/C CE/C	. 0
600 $= -432$	123 ENT +	1.23
	45 ENT +	1.68
	600 =	-4.32
B $5.00 + 5.00 = 10.00$	CE/C CE/C	. 0
	500 ENT +	5.00
	500 ENT +	10.00
C $6 \times 2 = 12$	CE/C CE/C	. 0
	6 ENT +	. 6
	2 X	.12
D $6^2 = 36$	CE/C CE/C	. 0
	6 ENT +	. 6
	X	.36
E $6 \div 2 = 3$	CE/C CE/C	. 0
	6 ENT +	. 6
	2 ÷	. 3
F $20 \div 7 = 2.8571$	CE/C CE/C	. 0
	200000 ENT +	
	7 ÷	285.71

(The 4 decimal places in the dividend minus 0 decimal places in the divisor equals the 4 decimal places in the quotient.) • (4 places-décimales dans le dividende moins 0 place-décimale dans le diviseur, égales 4 places-décimales dans le quotient.) • (4 Dezimalstellen im Dividend weniger 0 Dezimalstellen im Divisor ergibt 4 Dezimalstellen im Quotient.) • (Los cuatro lugares decimales del dividendo menos 0 lugares decimales en el divisor son iguales a los cuatro lugares decimales en el cuociente.) • (As 4 casas decimais do dividendo, menos 0 casas decimais no divisor é igual a 4 casas decimais no quociente.)

NOVUS WARRANTY CERTIFICATE

Please retain for your records. See insert for trouble-shooting tips and product service locations.

CERTIFICAT DE GARANTIE NOVUS

Veillez le garder pour référence. Voir le livret ci-joint pour tous renseignements concernant les problèmes possibles et la location des agences de service NOVUS.

NOVUS GARANTIESCHEIN

Diesen Teil behalten Sie für Ihre eigenen Unterlagen. Für Hinweise bei Störungen und NOVUS Kundendienst-Anschriften siehe Beilage.

CERTIFICADO DE GARANTIA NOVUS

Sírvase conservarlo para caso de consulta. Véase el folleto adjunto titulado "Consejos para localizar fallas y Centros de Servicio de Productos" NOVUS.

CERTIFICADO DE GARANTIA NOVUS

Por obséquio conserve consigo para seu controle. Consulte o folheto em anexo intitulado: "Lembretes para a Localização de Defeitos e Centros de Serviço de Produtos" NOVUS.

Model / Modèle / Modell

Modelo / Modelo

Serial No. / No. de série / Seriennummer

No. de série / Numéro de Série

Purchased from / Nom du vendeur / Bezogen von

Comprada en / Nome do Fornecedor

Date Purchased / Date d'achat / Tag des Kaufes

Fecha de compra / Data de compra